**Position in the project:** PhD student

**Scientific discipline:** Chemistry, Organic Chemistry, Soft Materials Science

**Job type:** Employment contract, full time

**Number of job offers:** 3

**Remuneration amount/month:** salary of 6000 PLN/month brutto

**Position starts on:** October 2nd 2017 (January 2nd 2018 at the latest)

**Maximum period of contract/stipend agreement:** 36 months

**Institution:** Organic Materials Research Group, Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences

**Project leader:** Prof. dr hab. inż. Piotr Kaszyński

**Project title:** Supramolecular materials designed for fundamental studies and energy conversion technologies

*Project funded under the Team program by the Foundation for Polish Science (FNP)*

**Project description:**

PhD students will participate in 3 years-long research projects focused on the development and applications of molecular and polymeric materials containing stable radicals and boron clusters specifically designed for addressing needs in energy harvesting and storing and information processing. The research involves synthesis, fundamental studies of soft materials, their self-assembly and characterization of bulk properties in search of new materials for molecular electronics, spintronics, photovoltaics, and ion battery applications. We are seeking highly motivated candidates with well-balanced experimental and theoretical skills, interested in soft materials, liquid crystals, magnetic phenomena, organic semiconductor, and device testing.

The project includes collaborations with scientists from University of Warsaw, European Space Agency, CreoTECH, University of Pau, University of Stuttgart, University of Valencia, and University of Alabama, USA, where some magnetic, photovoltaic, electrochemical, spintronic and device testing experiments will be performed.

**Key responsibilities include:**

1. Organic synthesis and characterization of molecular materials
2. Polymer preparation and characterization
3. Magnetic characterization of radicals in solutions and solid-state
4. Impedance spectroscopy of ionic liquid crystals
5. Travel to collaborators to perform specialized measurements and device testing.
6. Writing reports and publications
### Profile of candidates/requirements:

1. MSc or equivalent degree in Chemistry (must be defended by 30th September 2017)
2. Research experience in at least one of the following: organic synthesis, characterization of liquid crystals, boron cluster chemistry, organic magnetism, organic photovoltaic materials.
3. Knowledge of spectroscopic methods (IR, NMR, UV-Vis)
4. Enthusiasm and high motivation for learning new techniques and collaboration with other research groups
5. Ability to communicate and write in English (knowledge of Polish is not required)

### Required documents:

1. Curriculum Vitae
2. A copy of MSc diploma (if not available should be delivered after graduation but before joining the project)
3. A copy of transcript from undergraduate courses
4. At least two recommendation letters (sent directly by the Referees)
5. Mandatory enrollment into the PhD program at the Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences within the first year of work (passing a CMMS-PAS administered test or GRE Subject Test in Chemistry or Physics with a score >60% is required)

### We offer:

1. Acquiring skills in the field of synthesis and extensive characterization of paramagnetic and dielectric soft materials combined with quantum-mechanical calculations
2. Funds for visits to other laboratories to conduct measurements and for attending scientific conferences
3. Friendly and highly motivating interdisciplinary and international team-work environment
4. Rewarding salary

Please submit the following documents to: kaszynskiTEAM@cbmm.lodz.pl

Application deadline: September 11th, 2017. Selected candidates will be interviewed in person or via Skype immediately after the closing date.

For more details about the position, process and helpful forms please visit: http://www.cbmm.lodz.pl/work.php?id=70&title=piotr-kaszynski

Euraxess job/stipend offer (in case of PhD and postdoc positions): https://euraxess.ec.europa.eu/jobs/230745

Please include in your offer:

"I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended."